

ABSTRACT OF THE DISCLOSURE

[0141]

A front-loading, refuse collecting vehicle is modularly provided with a combination of a low-profile, front-loadable waste bin (intermediate container) and one or more, side-loading robotic arms. To reduce mechanical stresses along couplings between the vehicle and the combination of the intermediate container and the robotic arm(s), a major portion of the mass of the robotic arm mechanism is situated to the rear of the intermediate container so that a mass and beam combination is defined where the mass-supporting beam has reduced length. More specifically, hydraulic and/or other relatively massive motor means of the robotic arm mechanism are mounted to the rear of a refuse-containing wall of the intermediate container. Elastomeric and/or other dampening means may be interposed between the vehicle and the bulk mass of the combination of the intermediate container and robotic arm mechanism for converting into heat some of the vibrational energy which may otherwise move between the vehicle and the combination of the intermediate container and robotic arm mechanism. A modular sled system may be provided for supporting different robotic arms in combination with refuse containers made of different materials as may be appropriate for different waste collection situations.
